

WELCOME

Welcome to all, from dedicated followers to first time readers. April's here and the magazine seems to be getting bigger! Which is a result from you guys, as a new publishing company things are tough at first, but as we now are getting more an more subscribers we are starting to get the budget we need to boost the content, let me tell you some of what we have this month:

We are featuring heavily on the more geometric side of 3D this month, we interview product visualization artist André Kutscherauer, vehicle visualization masters 'Eden Lab' and the making of the Nokia N90 by Ali Ismail. For all you organic lovers, Richard Rosenman shows us what he does best and two more 'making of's' being 'Deep Fish' by Olga Antonenko and 'Kameswaran Iyer' by Prashant Sadaphule show us how they went about their natural creations.

Must not forget the Joan of Arc mega tutorial series which comes to close this month, well done to all who have followed it all the way through. Next month we start a new super tutorial series with versions for all the big 5 software packages, just check out the model we are making on the next month preview page! More tutorials from our in house texturer Richard Tilbury, and continued compositing excellence from Hasraf Dulull to mention a couple of many you will find on this month's 94 pages....as you can see, there's plenty to be reading, so get going!

ABOUT US

Zoo Publishing is a new company comprising of a small team here in the Midlands, UK. This magazine is our first project which we are hoping, with the support of the community, will build into a great resource and a highly anticipated monthly release. The 'support of the community' is an interesting point, where a 'magazine for 3d artists' is not an original idea, the marketing and distribution of this magazine, as far as we know, is a first. It follows the principle of traditional magazines that are sold on news stands and in many outlets, but being a digital downloadable mag the many established web communities on the net are our outlets and newsstands. 3DCreative is supported by 3dexcellence, 3dkingdom, 3dlinks, 3dm, 3dmonkeys, 3dnuts, 3dpalace, 3dresources, 3dtotal, 3dvalley, 123d, ambiguous arts, cgchannel, cgdirectory, cgfocus, cgunderground, childplaystudios, daz3d, deathfall, digitaltutors, kurv studio, max-realms, mediaworks, rendezvous3D, spinguad, subdivision, the3dstudio, thebest3d, vocanson & vanishingpoint. We look forward to lasting and successful partnerships with these CG community sites.



Every month, many artists from around the world contribute to 3DCreative Magazine. This month, we would like to thank the following for their time, experiences and inspiration.



Ali Ismail

3D modeler & Animator > Freelancer > Amman, Jordan Ali is currently working on multiple freelance projects until he finishes university. He will



then have the opportunity to work as a full-time 3D artist and will continue to develop his 3D skills. His customers include "Microsoft", "Schadler Kramer Group Advertising" and many more. He also fully designed the first 3D games that were released in Jordan.

ali@aliismail.com www.aliismail.com



André Kutscherauer 3D artist > Munich/ Germany > Started with a program called "Raytrace Pro 2" for DOS. Then I learned Cinema 4D for

animation and 3D Studio Max for Visualisation. I'm working with 3dsMax for more than six years now. I'm currently employed as 3D Operator in a Photo studio. After work I try to use the photo knowledge to realize some ideas and illustrations.



Prashant Sadaphule

3D Artist. I started as a Visualize for prepress. For the last 6 years I have been working as a 3d Artist. I always



loved to do 3D art, and in my spare time I really like to create high poly characters. I always loved to sculpt, and today I simply expanded this interest to 3D.





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Richard Rosenman

Has over 10 years in the Animation industry Producing over 50 commercials for film & broadcast, most of which he has directed. With extensive

experience in all aspects of animation from short & long form, series, gaming, effects, web & film, In 2003, he co-directed "Plumber", a 5 min fully CG short film which won various festivals, was nominated for a 2004 BAFTA and was eligible for a 2005 American Academy award. richard@richardrosenman.com http://www.richardrosenman.



Olga Antonenko

Concept artist/mattepainter/ compositing artist/3D artist. Moscow, Russia. Started as a concept/background artist for animated films in 2000.



Now working in cinema production. This year worked as a mattepainter and compositing artist on feature film "Wolfhound". Currently working at Kinopostproduction department Channel One Russia on cinema and commercials production.

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Luciano Iurino

I started back in 1994 with 3D Studio on MS-Dos as modeler/texture artist. In 2001 I co-founded PM Studios (an Italian videogame developer)

with some friends and I still work for it as Lead 3D Artist. Recently we have developed the videogame "ETROM – The Astral Essence". I also work as freelancer for different magazines, web-portals, gfx and videogame companies. Recently I left the 3dsmax environment to move on XSI.

iuri@pmstudios.it



Vojislav Milanovic

3D modeler & animator, vfx compositor, Anigraph studio, Banja Luka, Bosnia Self though allround 3D guy, started to doodle around in

3D about 8 years ago. In the last 5 years I have done a lot of various things from print and TV ads to gaming & movie graphics. Currently involved in multimedia study and character developing for an animated feature movie. One of my carrer goals is to work in a large studio and make my own animated movie.

vojo@teol.net http://users.teol.net/~vojo







Niki Bartucci

3d modeler > Freelancer
Bari, Italy > I started working in
the field of Computer Graphics
in 2000 as an illustrator & web
designer. In 2003 I started

using 3d graphic software such as Cinema4D & later 3d Studio Max. That year I worked on ETROM - The Astral Essence, RPG video-game for PC, developed by PMstudios. Currently I'm a freelancer & I specialise in commercials. I Like 3d graphics and video-games, especially RPG & RTS video-

niki@pikoandniki.com www.pikoandniki.com



Taylor Kingston

3D artist > Digital Illusions
(DICE) > London Ontario,
Canada > Started out with 3D
on Studio Max 1. Self taught
through high school, going

to Sheridan College for tradition art, and Seneca College for Computer Animation where I switched over to Maya. Hoping to one day break into film, perhaps even getting into the directing side one day. Currently working at Digital Illusions as an object artist.

taylor.kingston@sympatico.ca puckducker.deviantart.com







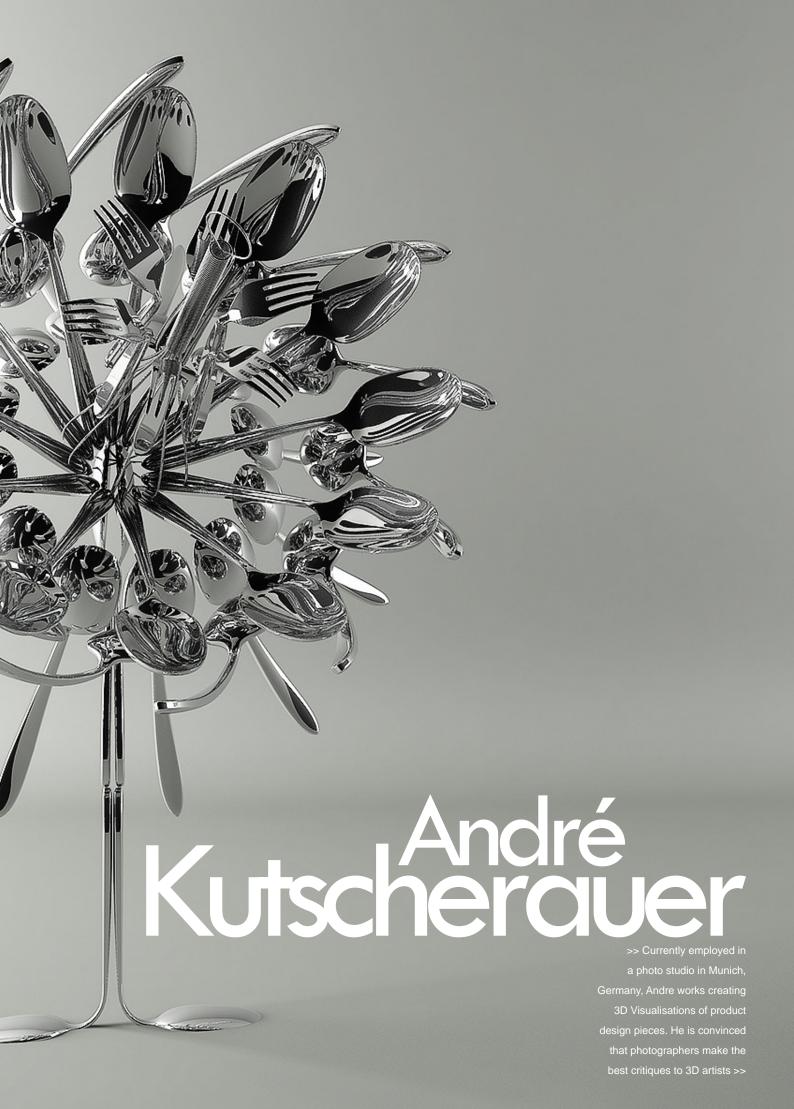


Giuseppe Guglielmucci

3d modeler / 3d animator >
Freelancer > Bari, Italy > I
have began to use computers
with the epoch of the vic20



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André Kutscherauer

Hi André, Can you tell us a bit about your current location and employment?

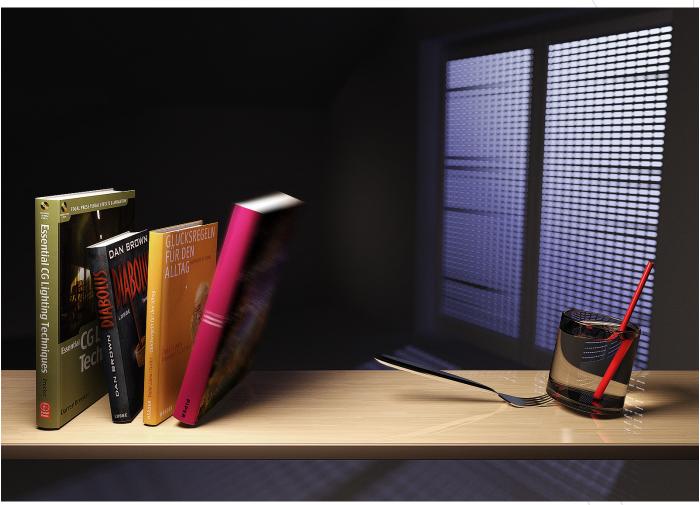
I'm currently employed in a photo studio in Munich, Germany. Here I'm doing 3d visualisations of design pieces. I'm the only 3d artist here, but I have three photographers around me. They are the hardest censors that a 3d artist could possibly have! :-)

Aha! So they are constantly critiquing your work for ultra photo realism?

Oh yes, they are constantly critiquing. They often see details that I miss as I'm not so experienced in photography. I really hope they will continue to do this. It makes really a rewarding collaboration.

A lot of your work is for product designs and renders, can you tell us a bit about why this is and also a little about your working practices when making such a render?

I think it's because of our customers. Often they have design studies and the model making of a real prototype would be very expensive. Here 3D Visualisation is extremely helpful. My current job gives me incredible possibilities to learn a lot about light because I have the "reality of light" right here in our real photo studio. So I developed a "reality-





connected" workflow. "Do not fake anything" is my motto. If the picture looks bad – don't tweak the shadows or opacity – think about your lights and think about your materials! To an extent of 75% I'm a photographer (with a "21Ghz" camera).

Yes I think lighting is the essence of photo realism, in a typical project how much of the time do you spend on lighting as opposed to modelling for example?

In most cases the lighting takes about 85% of the time. Of course the modelling is the basis of it all. Even if you perfectly light an object, it will never be photo real if there aren't correct fillets, bevels etc so the light cannot do its job properly.



We have been looking at your very nicely presented flash site, did web development lead into 3d? Or was it the other way round?

Thank you! In my case it was a nearly parallel development. Although I started 3d much earlier than flash, for me the quality of both subjects increased in parallel. Flash is a welcome alternative to the daily 3d works for me. I started to learn flash, because I saw some quite impressive internet pages around

this time (1999). As a beginner and without people around to help it was really hard to stay on track with this new subject, but today it seems it was well worth it.

Well it certainly shows throughout your site, have you ever exported your 3D creations into flash? Or for you is it just a presentation tool?

At the moment I just use flash as a presentation tool. Some weeks ago I created

a flash 3d object viewer that acts like the QuickTime VR Player but without the big download. This was a request of our customer. I've learned nearly every 3d real-time system for the internet that exists. Most of them have got the problem of needing an additional Player to install and those that run on java suffer from bad performance. It would be incredible if flash finally could show REAL 3d objects, 3d accelerated ones like in acrobat 3d because flash is so widespread and accepted by the most IT departments. I hope the union of Adobe and Macromedia could port this technique into flash!

It's very nice to see an artist's record of their works and achievements presently in such a great online portfolio, do you think is important for artists to do? Have you found the internet exposure has boosted your career especially with your award winning pieces?

Oh yes, I think this is extremely important./I would even say that this will become much harder. The 3d community is very very modern. They make extremely good use of new technologies like the internet. If Google can't find you, you simply don't exist and no one cares about your pictures! The awards are extremely important too! In my case it's not so much the effect to the outside exposure that drives me but much more on the "Inside". What I mean is it's like a personal game. The awards are the "points" which I challenge myself to get. These kinds of tributes are extremely motivating and encourage things like switching off the television and starting to create a new picture. ("This time I will get this award!!!") Maybe it's because of my youth with Atari consoles...





page 10 www.3dcreativemag.com issue008 april 2006 André Kutscherauer





For artists who do not have an online portfolio and are unsure of web software is there anyway you recommend they get started?

With Dreamweaver and Photoshop you can get a very nicely designed online portfolio with less time being spent on learning. I think it's not important to get a big flash site. I think a simple but nicely designed html page is enough. Just make it so it hits the right spot!

You have many skills listed for many software packages, is this important for your work or do you just have a continual hunger to learn more and more!?

These skills just came about as different parts of my daily work required them. But yes, I have to say that I'm really hungry for every new technique! For me this is a basic motivation.

Well thank you André for sharing an insight into your working practices and techniques, we hope your hunger continues and the result is the community seeing more and more great works from you!

André Kutscherauer

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Interviewed By:

TOM GREENWAY

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Sci-fi Textures
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suitable for building up
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straight to surfaces
such as stone, plaster,
concrete etc. This CD
has many bonus
features.



Vehicle Textures
The texures range from
Tyre bump maps to cool
flame decals. Included
are .dxf meshes of some
of the more 'common'
car objects. These
include Alloy Wheels,
brake calipers, dials etc.



Around the
World Vol 2
Mostly architectural
textures, derived from
original photography,
taken all over the
world.



Humans & Creatures
Suitable for texturing human and creatures. The textures range from natural, realistic eye, skin and hair textures to bizarre creature skins and eyes.



Ancient Tribes &
Civilisations
The texures range from
Aztec, Japanese,
Medieval, Greek &
Roman, Celtic & Viking,
Egyptian, Neanderthal,
Indian & Islamic, and
African.



Fantasy Textures Mostly fantasy textures some created from 100% original photography and othes hand painted by our own texture artists.



Dirt & Graffiti
Dirt masks/ maps and
graffiti. These have many
uses, the main ones being
as a mask to mix two
textures together or being
placed as a layer over an
existing texture to add in
detail and 'dirty it up'.



Trees & Plants
This DVD has trees based
on the four seasons, and
a variety of plants and
grasses and leaves with
each one with the very
own alpha map which
makes them ready to
pop into any scene.



Toon Textures
Toon and stylised
textures. The textures fall
into 'sets' hand crafted
by our artists, each set
has a continious style
throughout and contain
colour and bump maps
which range from leaves
to tiles and from wood
to windows.



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RICHARI

For the last five and a half years, Richard has been leading the 3D department at **Redrover Animation Studios** Ltd. in Toronto, CANADA, directing computer generated commercials, as well as co- directing the short film "Plumber" which won various festivals, was nominated for a 2004 BAFTA and was eligible for a 2005 American Academy

award.

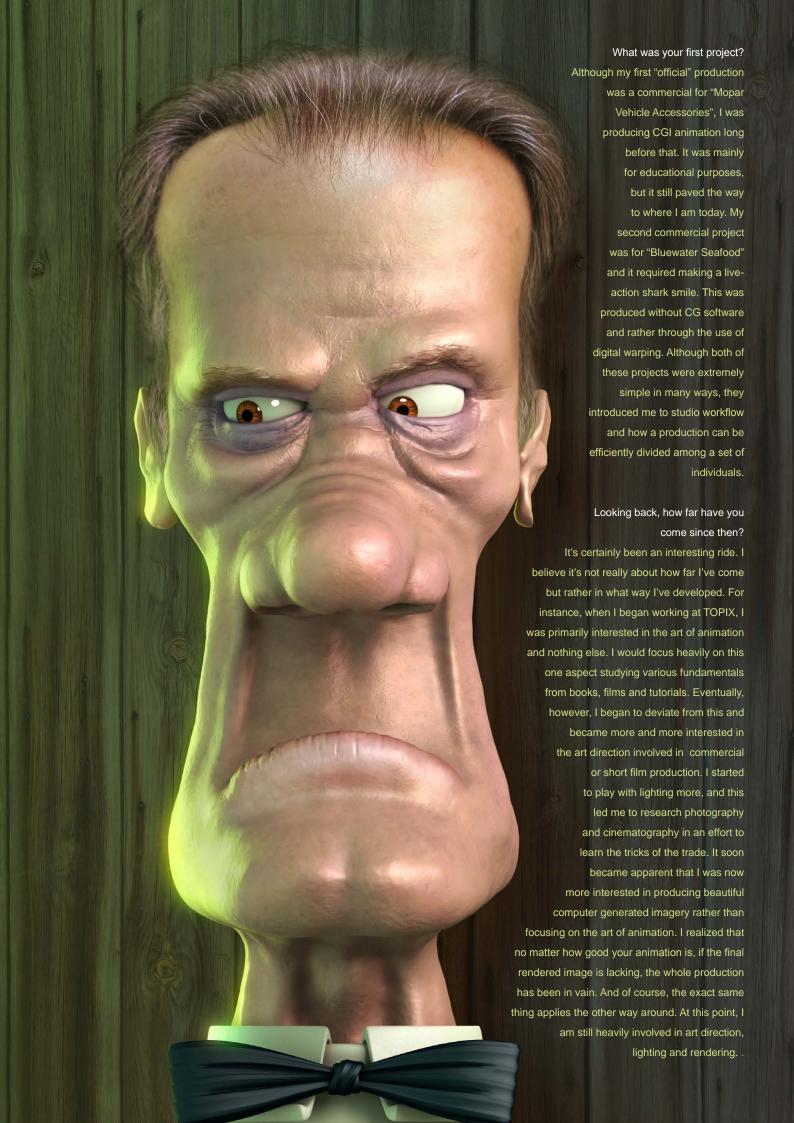


Hi Richard. Thanks for talking to us. How did you begin your 3D Journey?

When I saw my very first computer generated visual effect in 1985 in "Young Sherlock Holmes" I was instantly fascinated by this new artistic medium. I immersed myself in the creative and technical aspects of computer graphics in the early nineties during my teenage years, and this is when I got my first taste of 2D graphics software, primitive 3D software and even computer graphics programming (which I still do on my spare time). During this time, I also came into contact with one of the first consumer-based 3D software packages, 3D Studio for DOS v1.0. I spent the next few years learning this software, as well as trying out various other 3D applications and, by my mid high school years, I was certain I wanted to follow a career in the (still budding) computer animation industry. By the time I graduated, I had experimented with most consumer-based 2D and 3D applications, I had written a primitive 3D sphere rendering program, and I had created a two player action game also heavily focused on graphics. I studied classical animation for three years at Sheridan College in order to take the post graduate 1 year computer animation course.

After graduating the 3 year program however, I had enjoyed classical animation to such an extent that I decided to work in the field for an indefinite period of time. During the next few years, I worked in various cities such as Toronto, Vancouver, San Francisco, etc, in the classical animation industry producing series animation, game animation, etc, but as time passed, I eventually became more and more involved in the computer animation business through projects that would inevitably come my way. As a result, it wasn't long before I ended up working back in Toronto at a large computer animation and design studio using

Softimage. I began animating on commercials and eventually ended up directing. From that point forth, I have worked primarily as an animation director locally and internationally, in the commercial and short film computer animation industry. For the last five and a half years, I have been leading the 3D department at Redrover Animation Studios Ltd. in Toronto, CANADA, directing computer generated commercials, as well as Co-directing our short film "Plumber". At this current time, we have started our second short film which is in early production stages.



However, as a director, I also have to ensure that all aspects of a production are up to my standards, including storytelling, modeling, rigging, animation, lighting, rendering and compositing

Tell me, what is the history behind the formation of RedRover?

Redrover Animation Studios Ltd. is owned by Andy Knight. It is a small / medium sized service studio specializing in commercial 2D and 3D animation for national and international clients. Redrover has both a 2D, 3D and series department. The 3D division is handled and directed by myself, with a core team of approximately 6 other artists.







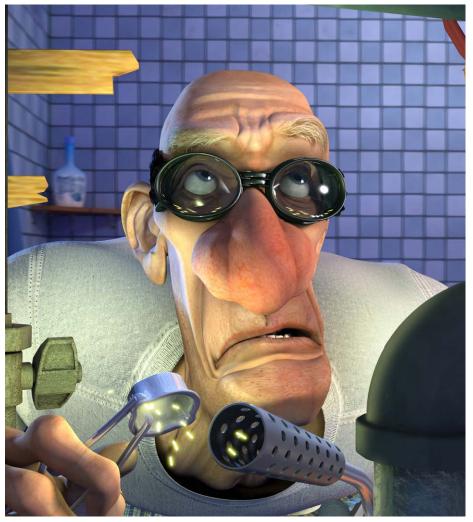




Your animated short 'The Plumber' has been greatly received around the world, how did it come about?

Plumber was our first fully computer generated short film produced over a six month period at Redrover Animation Studios Ltd. in association with Bravo!Fact. It was directed by myself and Andy Knight and produced by

Randi Yaffa. The concept initially began as a pitch for a grant from Bravo!Fact and, after a storyboard and animatic was created and submitted by Andy Knight, we were chosen as one of approximately 12 final contestants. With the grant officially awarded to us, we began production only one week after that in late August, 2002. The purpose of producing



fair and compromising director. As a result, we were both able to put our own visions together into this film. The co-direction was also divided into two sections - the pre-production, and the production. Andy Knight was more involved in the pre-production and developed the storyboards, character designs, and various other conceptual pieces. I then took over and executed it in 3D, along with my own ideas which resulted in an interesting fusion of 2D and 3D concepts. During the production, both Andy Knight and myself would review the film on a weekly basis and agree on what needed revising and what needed improving. The animatic was never fully locked. We continually made changes all the way to the very end which would improve the film in one way or another.

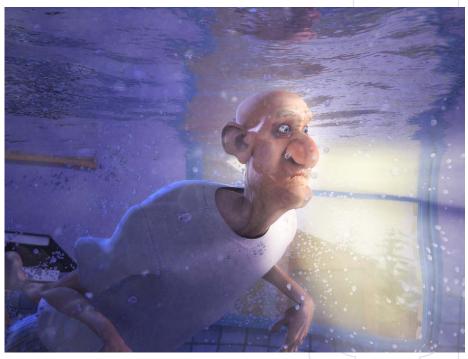
How important do you think it was for Red Rover to make a short like that?

The production of "Plumber" gave us insight into the enormous task of working on a medium length format project and how to tackle all the technical issues we were never faced with during commercial production. At

the film was to introduce Redrover into the short film production industry as well as to push the studios' creative and technological experience to the limit. The film was completed in February 2003, making it a six-month project from start to finish.

As a director, what particular input did you make to the final short?

The task of a director is to ensure the film gets developed in the way you imagined it. This, however, can become very tricky when you co-direct, as I did for the short film. In these cases, you have to learn to compromise and strive to reach an agreement you are both content with. I was fortunate to co-direct this film with Andy Knight, who happens to be a



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Richard Rosenman



never touched a computer before, except for email, and they are simply overwhelmed when you first show them how the software operates. It is at this point that the artist either succeeds or fails. Those that succeed accept the computer as nothing more than a tool and choose not to be intimidated by it. Those that fail often do so because they cannot understand that they are the ones in control of this creative tool. I always encourage new artists that work with us to ask questions, no matter how silly they may seem. Some



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questions which may seem trivial can be crucial from studio to studio as everyone has their own established pipeline and workflow. And of course, the team I work with are engaging people who are always ready to lend a hand when needed.

Favourite Project to date?

I would have to say the Robin Hood campaigns are probably the commercials I am most proud of. They turned out just right – a perfect blend of personable characters, fantastic animation, gorgeous lighting and a wonderful story. The

three spots were directed by myself but they could have never turned out as well as they did without the exceptional talent of my 3D team. Your work is only as good as the people you work with.

The 3 spots are wonderful, great character and style. Is this a style you enjoy working with?

My absolute favourite use of computer graphics is to create fascinating characters – specifically cartoony characters, so it is no surprise I really enjoyed this project. There is something magical about producing a









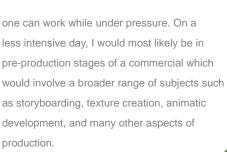
photo-realistically lit and textured character, with cartoon proportions. It's visually intriguing to watch and it questions the mind as to why these characters look and behave so real but don't actually exist. It's no wonder that many of my personal projects involve characters, all of which have quirky expressions that provoke the viewer into developing an imaginary past, present and future for them.

Another great part of the commercials is the essence of childish fun. Is this something we would discover if we came to the studio? I firmly believe a creative mind requires a creative environment. At work, we have a pool table, a foosball table and "Bondi", one of our modeller's dog, who causes trouble at the studio on a daily basis. We occasionally have video game matches and of course, the frequent poker nights and wrap-up parties. This may sound like a lot of fun yet no one takes advantage of this creative freedom. When a job needs to get done, everyone works as hard as they can to get it done well and to a level we are all pleased with. Rarely do we ever complete a job the night before it's due and go home. In most instances, we will complete the job the night before, and then stay the rest of the night adding our finishing touches until we are 100% happy with it. It's not simply about pleasing the client and agency, it's also about pleasing yourself and producing the best possible work you can create. When stressful periods come, you work together to get through it and make sure you can rely on each other.

And if we spent a whole day with you, what else would we learn?

I suppose that really depends on the day.

If it's near a deadline, you would not hear
me say much as I would be concentrating
on getting the job done properly and to my
liking. It's interesting to see how efficiently



Your personal projects, how much time do you get for them at the moment?

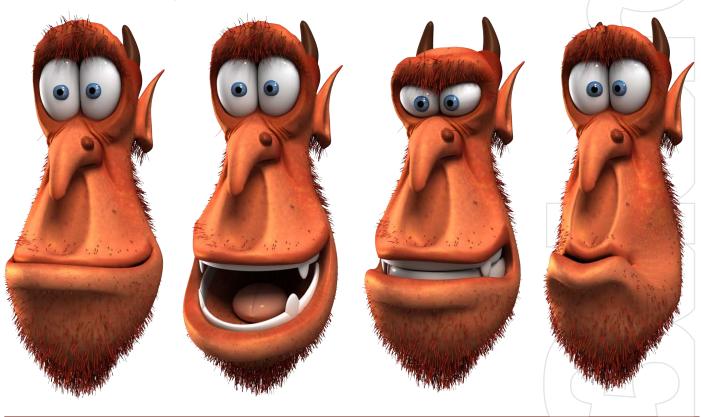
interview

Unfortunately, not much time. I manage to start various projects but not long into them, I'm caught in another deadline at work that puts any personal project on hold for an indefinite period of time. Of course, once the deadline is over I can continue, but as most artists will agree, it is particularly difficult to pick up and continue a piece of work once it's been put on hold as you lose some of the initial enthusiasm. Having said that, I still put in a good three or four hours in the evening working on my own projects, site maintenance, and additional freelance work. On top of that,

www.3dcreativemag.com



Richard Rosenman



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I exercise regularly at the gym which I believe is extremely important for anyone in our field, since we end up sitting in front of a computer screen for 8-12 hours a day.

Do you have a good piece of advice for anyone wanting to start their own studio?

Make sure you have a strong trust in the people you work with as you will have to rely on them and they will have to rely on you.

Know how to resolve conflicts and issues in a mature manner as these will always inevitably come up, especially in a creative environment.

Plan ahead so that you're prepared and

capable of taking on the workload that may potentially come your way. And of course, the most important advice of all I could give to anyone in this line of work is that hardware and software are completely irrelevant in this field, unless you are a programmer. It doesn't matter how well you know these tools or how many of them you know. What matters is how much creativity you posses and what you do with it. The computer is simply another artistic medium, but a fundamental knowledge of art concepts such as colour theory, design, composition, and anatomy are crucial in developing a successful career as a digital artist.

Thanks again Richard. It's been good talking to you.

It's my pleasure, and thanks for the opportunity to share my insight with 3DCreative Magazine.

RICHARD ROSENMAN

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Interviewed By
BEN BARNES





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an interview with EDEN LAB











INTERVIEW WITH EDEN LAB

Hi there could you introduce yourselves to our readers please?

After an experience we all had in the entertainment field as freelancers and employees, we finally ended up deciding to build something on our own. Really specialising on what we truly love to visualize. Allow me to talk about our roots. We were born in Turin, the Italian car city par excellence, that had something like 29 car styling and manufacturing companies at the beginning of the 20th century, many of which have become famous worldwide, thanks to their

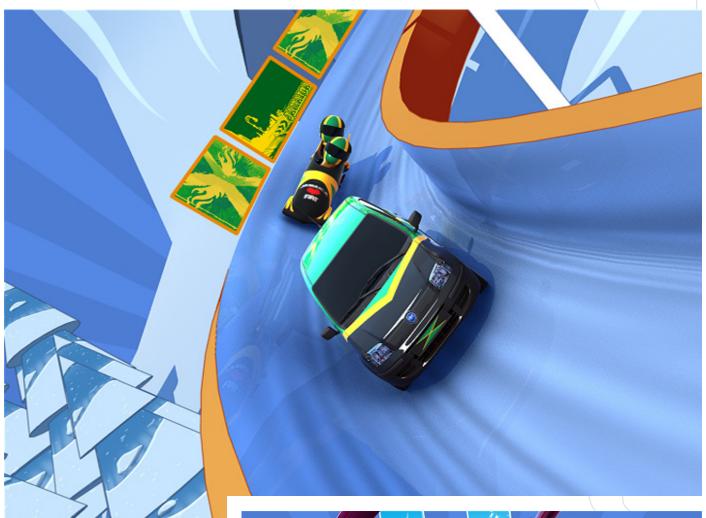
technological innovation, prestige and racing results. This is the field where we chose to compete, making the most of our knowledge in Computer Graphics.

So how did the name EDEN Lab come about?

When you look for a name that is going to

represent your environment for a long period of time, you wish that it's going to be something that pleases you, so what's nicer than EDEN!

Here is a secret. Our dream is to build a new studio in a techno-tropical place. We picture it like a Robinson Crusoe habitat, powered with Render-Farms and anything else we need to



do our job. That's why we have just bought a nice piece of beach front land, in the wild side of Brazil.

That's sounds really cool, are you looking for any full time staff:)

Actually yes, we are always looking for capable staff. But for job positions in Brazil, we will only hire compositors and 3D modellers able to Handle-Pass and Kite-Loop eheh;-)

So what is an average working day like in your studio?

In the last two years it's not something I would recommend to anybody. Pretty crazy and



demanding. And more than a few times the work days have turned into many nights at work too. Luckily, we have never missed a chance to shoot each other for half an hour in Quake Arena. Pretty relaxing, you know?

Could you describe the techniques involved with blending your 3D vehicle renders into actual scenes?

We think that most of the tools needed to blend CG into Reality are already there, in almost every 3D software. The real task is







doing it on time, optimizing the scenes and on certain occasions writing tools that actually work in a predictable and physically-correct way, so that you are able to block a certain amount of variables and focus on the actual effect you are trying to achieve. For example, we're not big fans of GI (Global Illumination) and FG (Final Gathering) because, set aside their correctness, we found that developing more specific, predictable and ready-to-use shading methods pays well more in terms of quality/time ratio

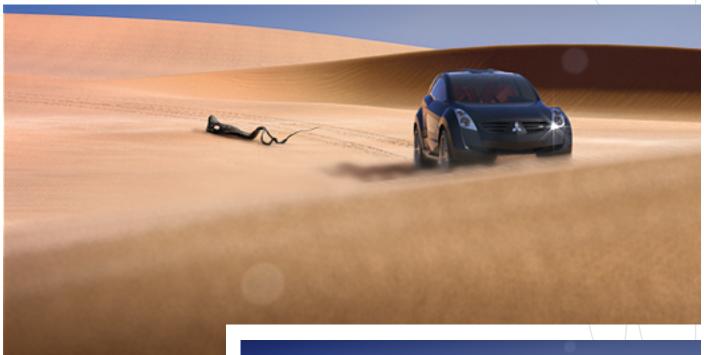
What types of shading methods do you use to substitute GI and FG?

Oh well, that's a secret! Seriously, it's nothing really exotic: we've simply been paying attention to the 'weak' parts of the software we use and tried to bridge some gaps and









custom tailor to our needs some existing tools. A few custom shaders we wrote were enough to satisfy our need for visual correctness and speed. We felt as well, that streamlining the 'model-to-final-image' pipeline was essential to provide good contents in a quick and predictable way, so we spent quite some time developing a robust workflow that we can easily adapt to any project.

Could you talk about the significance of HDRI in this process, and explain to any of our readers who are not familiar with this technique exactly what is involved?

In short HDRI (at least part of it) means capturing the real light ambience of a natural scene, and being able to reproduce it. This gives you a tremendous amount of useful info to start building a 3D photorealistic scene. We are now trying to reach a point where every part of our animation and rendering pipeline is based on physical rules. Well, what we get straight out of our renders most





of the time doesn't look directly meaningful. The magic only happens in compositing: combining nodes that simulate the more common capturing devices (like CCD and film), these apparently non-sense images turn into beautiful pictures. It's a pretty crazy approach to the thing, but it seems to be working.

Could you describe some of the common elements in the compositing process that contribute towards the final renders?

Just the usual stuff: a backdrop, the cars, shadows and various details like smoke, leaves, etc... most of the time we prefer to render the whole car in a single pass, just to avoid the hassle of managing composites (and scene setups) growing too complex. We always comp at 16-bit per channel or more, since this is the only way of getting clean and believable tones, especially after a bit of colour correction, or when you're introducing in your composite some behaviours that are characteristic of film or CCD devices.

Work aside, what do you do to let your hair

down?

Beer plays a dominant role in our lives, we just love it. And I am not even mentioning the









is what a couple of us are really into: from Kite-Surfing to Snowboarding and Martial Arts.

lol...there is nothing quite like having a nice cold beer after a hard day at work (we do not condone the use of alcohol for enjoyment purposes and remember kids you must be over 18 to drink alcohol). Snowboarding seems to be a very popular pastime in this industry, what's the appeal?

Because extreme sports are fundamental to kill the stress of "extreme" seated sessions, I guess. You just need a couple of hours riding soft powder to forget all the stress gained in the studio.

Where do you see EDEN Lab heading to in the future?

We would love to create a natural environment out of the metropolis stress where we could actually focus on our studies, probably introducing more personnel to do the "dirty-jobs". We are now establishing a leading position in Italy for the realizations of car

commercials, but we would love to move also on other markets, exporting this Italian passion for design and vehicles.

And of course we would love to participate in some movie shots. Who knows, maybe with some crazy car chasing.

Crazy car chasing that rings a bell:) So can you let the readers know what you will be making next?

Honestly, it was more a call than a ring, unfortunately. We are now working on a new spot for a major car company and it's going to be the coolest. We've got some extreme driving in it. We are also taking care of some non-car-related cg- shots for a couple of movies: maybe that's why we are thinking about how cool it could be to get involved in a blockbuster movie where we could use our skills on vehicles.

If you had to choice of any client to add to your portfolio, who would they be?

Lamborghini and Bugatti

Well its been a pleasure, thanks

TO SEE MORE WORKS, VISIT OR EMAIL EDEN LAB AT;

info@edenlab.com http://www.edenlab.com

Interviewed By:











PRODUCTION

TD, animation, Compositing and post production: Hasraf Dulull; Car Modelled by: Pitre Kasinski; Car Rigging and Vray car paint Shader: Simon Reeves; Time Taken: 2 Weeks Software: 3D Studio Max 7.0, Vray and Combustion 3.0; Hardware: BoXX Workstation with Dual Optron and 2GB RAM





INTRODUCTION

The short sequence was part of a concept I was pitching to a few game developers last year (early 2005), while working as creative director at Olmec studios Ltd. Because of the nature of the small studio, time resulted in budget, so we didn't have a lot of rendering time and budget to spend on people coming in to work on certain things like most studios did. So I set up pipelines which lend itself



heavily on post production. We did the best we could in 3D Studio max and made good use of HDRI in Vray, but very minimal global illumination was used to minimise the high rendering times because we only had one machine with a license of Vray on to render. Thankfully Discreet's file format: RPF (rich processing format) enabled us to control things like motion blur and depth of field in the post production phase rather than in the rendering

stage. Compositing was definitely going to play a big part in this short project for sure to deliver the cinematic quality at a very short time frame. Although 3D played a part in getting this sequence done with Vray, this walkthrough is more about the compositing stage which played the biggest part in terms of getting the final result.

STAGE 1

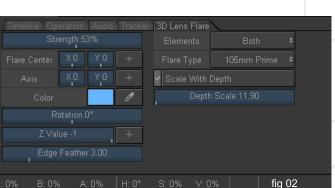


I set up the HDRI scene in Vray using basic setups with a matte painting in the background to be used for the cityscape. I made sure that the matte painting on the plane was set to self illumination as we don't want shadows projected on it. I then set up a the render using the RPF file format and enabled velocity (for motion blur), z-depth (for depth of field) and Object ID to control any objects I set an ID on in the scene. (fig 01)

STAGE 2

The next stage was to add some motion blur and depth of field to the sequence to make it look less like a still image but more dynamic. So I went to Operators > 3D Post and selected RPF motion-blur and moved the slider to

increase some values until I was happy with the result. To add some daylight colour and sheen to the car and atmosphere I applied 3D Post Lens Flare. Now I know what you are thinking... cheesy lens flare – Yuk! But not if you use it in the right way, and the way I used was not to create an in your face lens flare effect but used to flare out the atmosphere and



material on the car paint shader. (fig 02). The 3D Post Lens flare works very differently from the standard lens flare because it works on Z-depth information in the RPF file. Because of this I used to create a lighting depth look to the scene and also used it to create the sheen sparkle you get on the tip of the bonnet when the car cuts through sun light – a very

cool effect. Pro-Note:
Bear in mind Post
RPF operators are
very Processor and
RAM dependent so
be patient. It's best to
work in the Preview
mode instead of Best.

the chase



STAGE 3

Now that I have the right motion-blur, depth of field and the lighting depth I needed to make the shot believable when in motion, I needed the right colour palette. The colour palette is very important as this is what will be used on the other scenes to keep the shots consistent; in film/TV production this is called 'Grading'. The colour Palette is also what sets the mood of the sequence. The Operators I used were: Colour Shift: to control the tonal balance in the RGB colour spectrum, this is useful if you want to tone down the saturation of a colour or even change a particular colour's hue or lightness. Colour Corrector: this was what defined the overall colour look to the sequence. There are 3 points to work with allowing you to mix the tones of your colour. Once I was happy with the colour palette I created, I then saved out each operator setting out as a file which can be loaded into the other scenes using the same settings I created here (fig 03). To do this follow follow these steps:

- 1) Click on export, this will come up with a dialogue box asking you to export operator settings. Make sure you label it appropriately like Colour Shift or Colour Corrector settings.
- 2) In your next scene you add the same operator but this time you don't need to spend ages getting that colour palette you have for the previous shot, you just click on Import and load up the operator setting file you saved. That's it! And you can still tweak it to your hearts content. Why is this better than just copying the layer and pasting it into the next shot workspace? For starters its more stable, but more importantly you can email your settings to other artists to work on, or build up a library of colour palettes which you can import anytime in any combustion projects.



STAGE 4

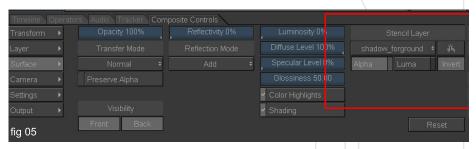
(fig 04) The next thing I wanted to do was to add a helicopter gunship chasing the car. I rendered this out as a separate element mainly because (1) it would have increased the overall rendering time from 3DS max and (2) I can control it better as an element on its own. I was able to tweak the way the gunship looked

in terms of its tone and colour. It also rendered out much quicker as there was not much reflections needed to compute but also the car was not in the scene to calculate. This was rendered out as an RPF with transparency.

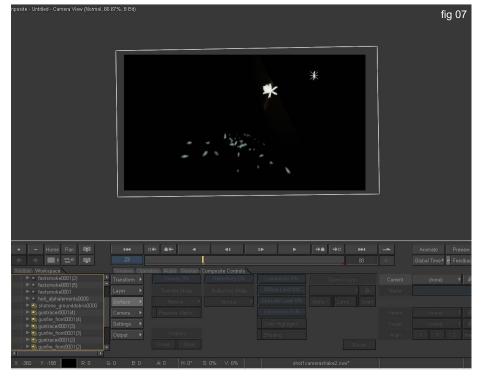


STAGE 5

The problem I had next was that I wanted my helicopter to be behind the car and the road bridge signs. So I had to find a way to isolate those objects in the scene. There was no way I was going to rotoscope each frame! So the solution as to create a mask, I did this by opening the max file and rendering the car and bridge only with everything turned off. I could have also just added a standard material to those objects to make it render quicker as all I needed was their shape and not their material and lighting. Once I did that (which rendered out super quick), I imported the sequence into my workspace. Remember this will be used as data and not visual so I didn't care that it looked unattractive. I then selected my Helicopter pass and when to Layer>Stencil and selected the mask sequence before hitting 'invert alpha' to tell combustion to stencil out the area on my helicopter plate which matches with the mask sequence. (fig 05, 06) Pro Tip: It's sometimes best to add a slight Gaussian blur to the Mask layer as stencil tends to make the edges look very sharp. By adding a Gaussian to your mask sequence layer it will make the edges smoother and less hard edged.







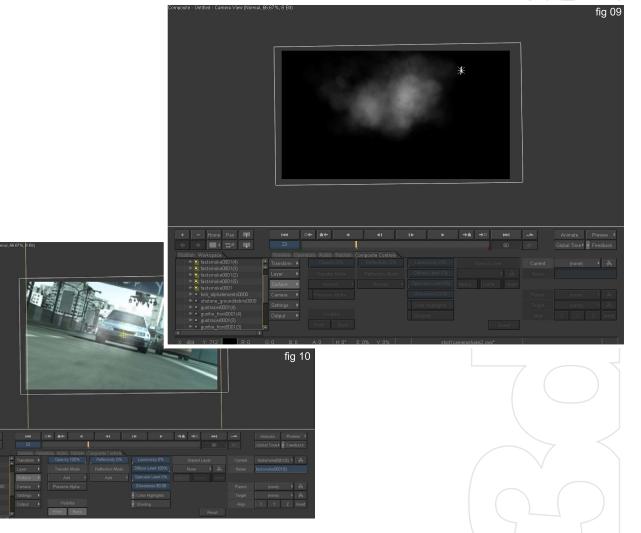
STAGE 6

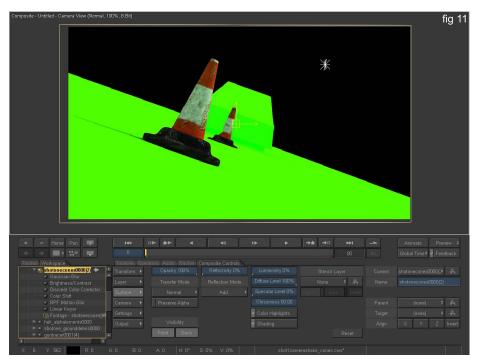
The next stage was to add the visual effects element such as the gunfire and tracer from the gunship in pursuit with the car. As well as debris kick up from bullet hits on the ground. (fig 07). All the debris kick up and smoke were created in 3D Studio Max particle flow, and thankfully because of the nature of the fast speed shots these effects only required a few frames rendered. All VFX was rendered out as uncompressed TIFFs with alpha channels. The VFX elements were all multi-layered several times on top of each other with different transfer nodes and opacity settings to create the required look I was after. The VFX were then tracked manually with the camera and car. I didn't bother using the Tracker feature in combustion as each shot was short

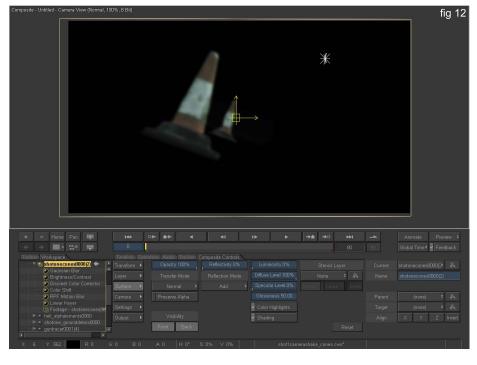
the chase

and also I wanted full control of the track on elements such as the Gunfire and tracers to be able to do subtle scaling and opacity on some of the frames to heighten the realism that it was part of the one scene. (fig 08, 09) Atmospheric smoke was rendered out as a large short TIFF sequence (double the size of the actual resolution) and then animated the scale of the sequence with a Dolly Blur Operator (which also had its values animated) to heighten the speed look and feel of the sequences. (fig 10)









STAGE 7

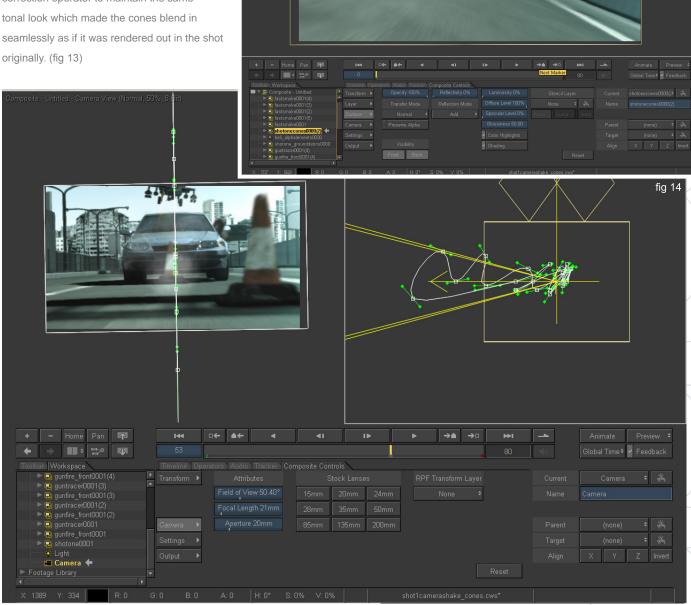
During the daily review of the development of the shot, I noticed that there needed to be something in the first few shots to increase the tension and also the chaos in the scenes. Someone suggested traffic cones being hit past the cameras and I quite liked it as I could imagine it. But there was no way I was going to re-render all the 3D scenes again! Especially when the deadline for this was in 2 days! So I had to think of a quick solution to do with compositing that would save the day and get the cones in the shot seamlessly. So I placed the cones in the Vray scene and was about to render out the scene, but then realised just compositing the cones over the shot with the right lighting and grading match is not going to work as the cones actually flip over the car bonnet and over to the back... again time was of the essence and I was not going to spend hours rotoscoping the cone into the shot! So I thought all I need is a mask of the car to tell the cones to not be visible but that won't show the cones bouncing off the car. So I decided to render the car and the track with the cone. But the cone was the only thing that was rendered with Vray shaders and lighting of the other shots. The car and the ground had a 'self illuminated' Green material applied. I was basically mimicking what they do when they film live action in front of a green screen for Feature film production. (fig 11). I then brought the sequence into combustion and used a 'Discreet Keyer' to easily key out the green. To remove the green hints in the reflections on the cones I used a 'colour suppression' operator to dial down the green while retaining the reflection. (fig 12)

the chase



fig 13

I then used the 'Dolly Blur' to create a motion blur effect. I used this operator as apposed to the 'Motion-blur' operator as it's much faster to use but also creates a slight streak effect which heightens the speed sensation. I then loaded up the colour palette I saved out on the colour correction operator of the shot and applied this setting to the cones colour correction operator to maintain the same tonal look which made the cones blend in seamlessly as if it was rendered out in the shot originally. (fig 13)



STAGE 8

To give the sequence a little kick of energy and a feeling of speed & chaos, I animated Combustion's virtual camera to create camera shakes. Because the sequence was rendered

at HD resolution I had to luxury to move the camera in and out pass safe frames to create a manic camera pan and shake in X, Y and Z directions in 3D Workspace mode. I then used Bezier handles on each key frame in the

timeline of the camera shake to control the balance of the shakes and spread some keys apart from each other to create a random feel to each shot's camera shake. (Fig 14)

the chase

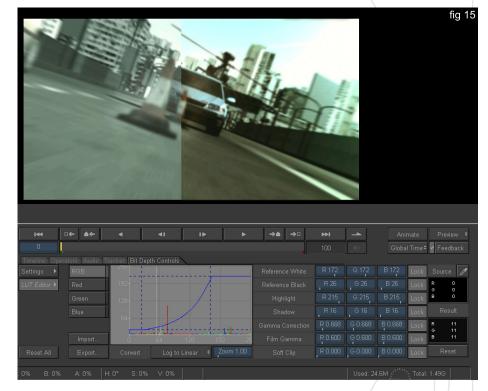
STAGE 9

The sequence was finished now, and was rendered out as a sequence of uncompressed TIFFs. The next stage was to create an overall grade (don't worry this is the final stage where we add some extra icing on the cake to make it even sweeter!). I wanted to give the whole sequence a sense of Depth in its colours and also place it in an environment similar to the freeways on a hot sweaty day in LA. So I used the blues in the original palette to mix in some yellows to represent a hot day, and also 'crushed' the greys in the scenes to a more lush and tight look giving the whole sequence a sense of 'whole and complete'. The tool in Combustion 3.0 that allowed me to do this was the 'Bit Depth Converter'. This operator treats the sequence as if it was a piece of film footage so therefore I can play with Gamma values and tweak the blacks and highlights resulting in a more filmic look. (fig 15)

The Final Composite Zipped Quicktime movie can be downloaded from zoo publishing using this link:

www.3dcreativemag.com/movie-resource/ thechase.zip





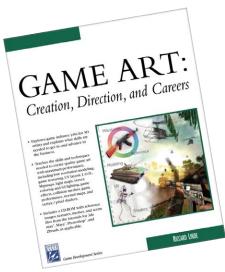




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CREATION, DIRECTION, AND CAREERS



This book is a publication essentially aimed at artists who aspire to break into the games industry. It is a comprehensive overview of the many aspects relating to game development from commonly required skill sets through to working practices as well as providing an insight into the technology driving the industry. The book delves into the numerous jobs available to artists nowadays and even goes as far as advice about interviews and contracts together with tips on creating the right type of portfolio. It is composed in a logical and sensible format, starting with a brief account of how the industry evolved and follows on to an explanation on how development studios are structured, dealing with criteria necessary to carve out a career in this field. With chapter three dedicated to preparation for job applications and the types of requirements often asked of companies the book goes on to tackle the general working ethics of a developer and the production methods

involved. All of this falls into section one of the book under the heading of; "Industry and the Artist", with a further three to follow. The next section entitled," General Art Creation", deals with exactly this - the key processes concerned with generating game art, i.e. modelling, mapping/unwrapping, texturing and animation with two additional chapters focusing on special effects and collision. After covering the principals of modelling and mapping Linde goes on to dedicate a chapter to putting these theories into practice by making a gun in a fashion representative of an actual studio. Part three and four of the book deal with the more technical issues associated with games including the limitations put on artists producing for real time environments. Some of the enduring problems faced by artists are discussed such as levels of detail, low poly tees, mesh topology and lighting as well as more advanced techniques such as normal mapping and high resolution modelling. To summarise then, the book attempts to outline both the creative and technical challenges faced by today's artists as well as teach and promote some of the core skills important to support a career in the games industry. The book is accompanied by a CD ROM which is not software specific and so teaches general principals appropriate to all programs.



ABOUT THE AUTHOR

Riccard Linde (Art Director) has been involved in the CG industry for over 10 years. Self-taught as a 3D artist, he migrated into the game industry 4 years ago, and has since released four AAA titles: Battlefield 1942 (artist), Road to Rome and Secret Weapons of WW2 (Lead Artist, Art Technical, and Art Director), and Battlefield Vietnam (Art Technical and Art Director). In 2004 he attended GDC as a lecturer explaining a technique involving multiple instancing of objects used for the jungles in Battlefield Vietnam.

BOOK INFORMATION

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A SAMPLE CHAPTER

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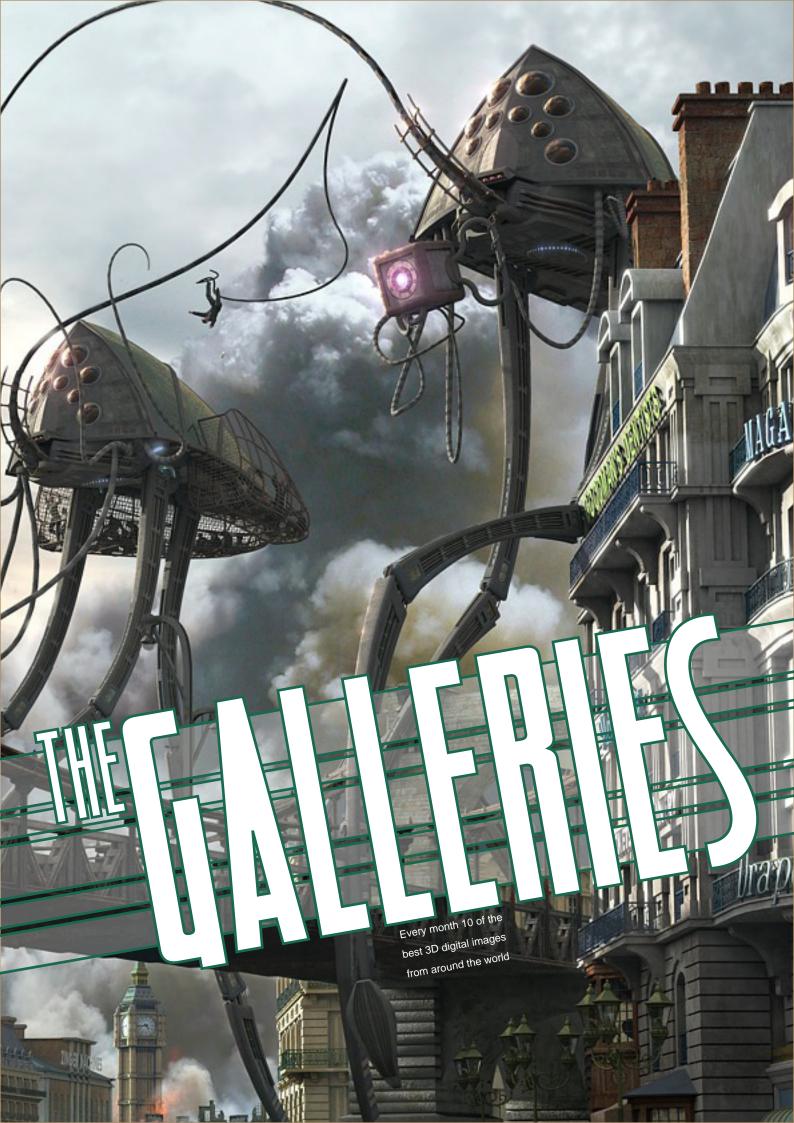
















EXECUTIONER

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BORIS VALLEJO'S: "VAMPIRE'S KISS"

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NO, I'M NOT PINOCCHIO'S SISTER!

Zoltán Pogonyi
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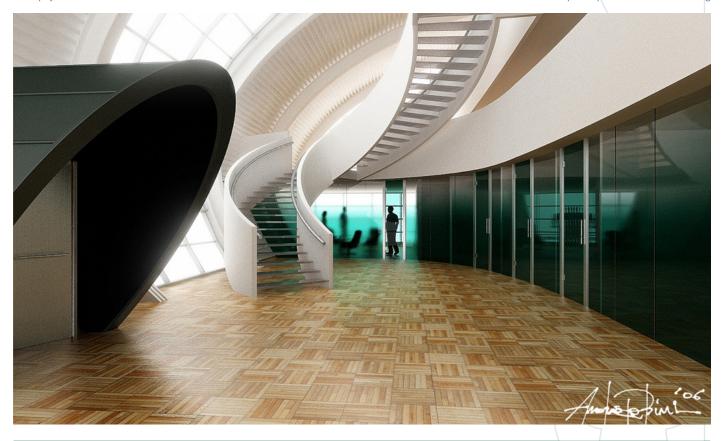
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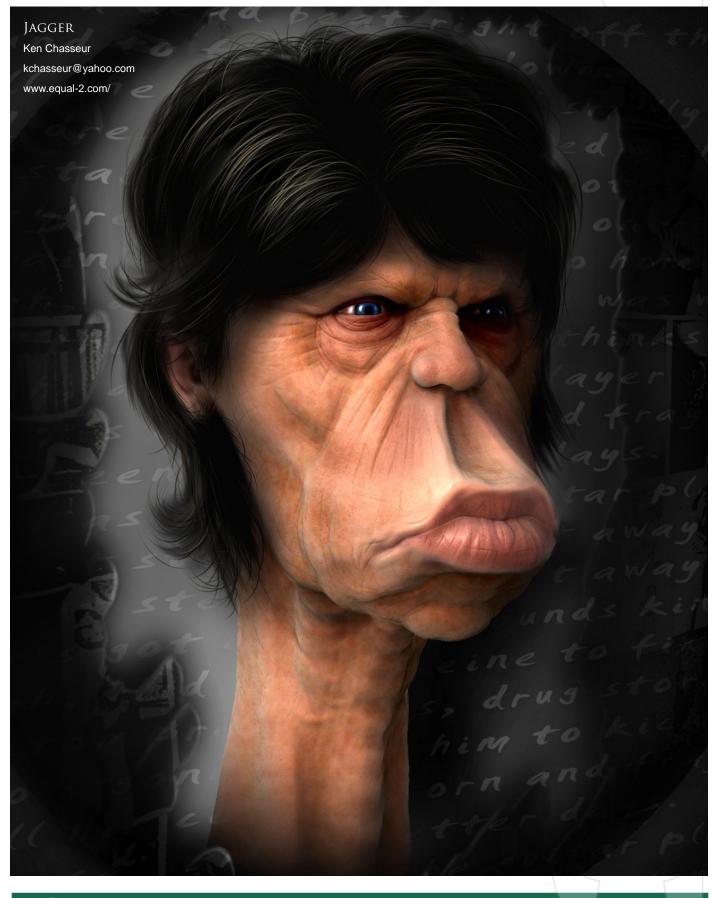




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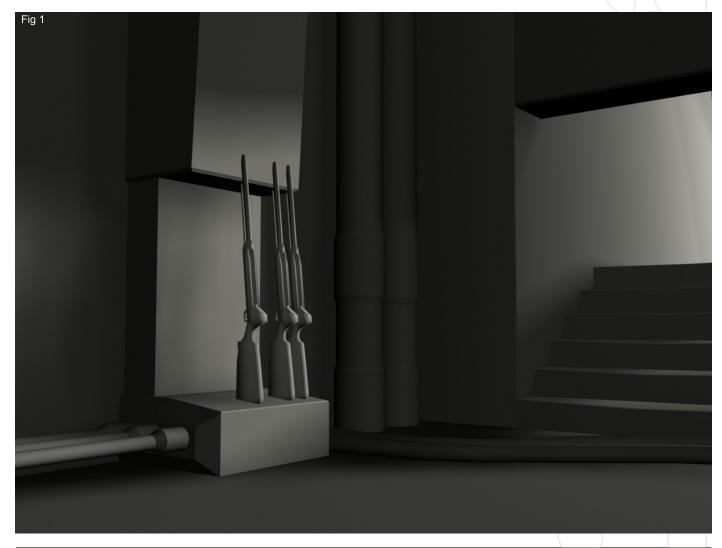


Texturing A Scene - Part 1

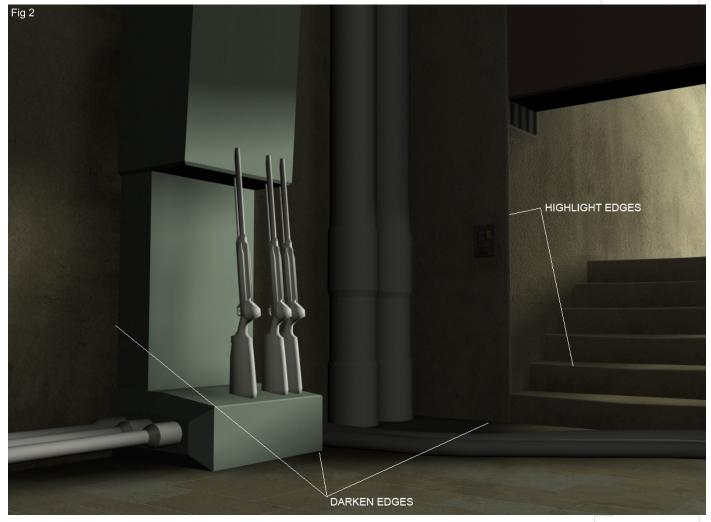
This will be a simple scene in which we have a staircase leading to ground level with a gun rack and some pipes in the corner and power cables connecting the rack. Being designed with a future setting in mind the scene will combine current and futuristic elements which will give us a little more room for artistic license. Our nomad will be provided with

a traditional looking rifle with some charge panels and a rack that also charges the guns. We will have the opportunity to paint textures for metallic objects such as the gun rack and pipes coupled with manipulating photo references in the natural materials used on the stone walls and floors. The main light source is at the top of the staircase leading to the outside which helps highlight the gun rack which forms the main feature in the room. In terms of a final render I find it is good practice

to light the scene alongside the texturing process so that we do not spend unnecessary time on aspects that will be unnoticeable or invisible. This is not an option if our model is to be used in a game environment unless it appears as a pre-rendered background in which case the poly count would also prove to be less of an issue. However as this scene is being textured in view of it being used with real-time rendering and has been built with the character in mind I have restricted the







poly count somewhat and reserved much of the detail to the textures which is a common practice. What is also a widely used trick in lower poly environments is the method of integrating the lighting effects into the texture to simulate highlights and shadows in the game world where there is a lack of geometry. Another technique that is often used is texture baking in which a map is created based on an objects appearance in a rendered scene. In other words an object can be lit independently and then the lighting effects can be applied directly onto the unwrapped mesh so that the geometry appears lit in a scene even if the lights are switched off. These processes help convey the illusion of a more complicated and convincing environment together with bump and specular maps which are now

widely supported alongside normal maps. If it were intended for use in a game engine we could also rely on using vertex lighting to create many of the subtle lighting effects but for the purposes of this tutorial I have placed numerous omni lights in the scene to help create a similar quality and help give our scene some atmosphere and interest. As is also common in games I have tried to keep a consistent resolution throughout and so have unwrapped the scene maintaining a scale that matches the geometry. However on with the show and the first step is to apply our main areas such as the floor and walls. In this instance it is good to begin with photo references if they exist as these are in plentiful supply and provide a good starting point. When selecting our floor texture the main thing to

bear in mind is the scale and edges. Obviously we do not want to see our flagstones or tiles end midway where they meet the wall as this would look unconvincing so make sure there is some grout at the edges. When applying textures to low-poly objects it is always worth bearing in mind where and how light would effect them and a good general rule is to highlight the edges of objects and darken the areas where surfaces meet such as walls, floors and around the bases of things like the gun rack which helps prevent objects from "floating" as well as softening the shadows too. In the scene I have put a highlight down the edge of the wall and along the steps where it would have a tendency to catch the light and added some darker tones representing dirt and shadow in some of the corners. (Fig 2)

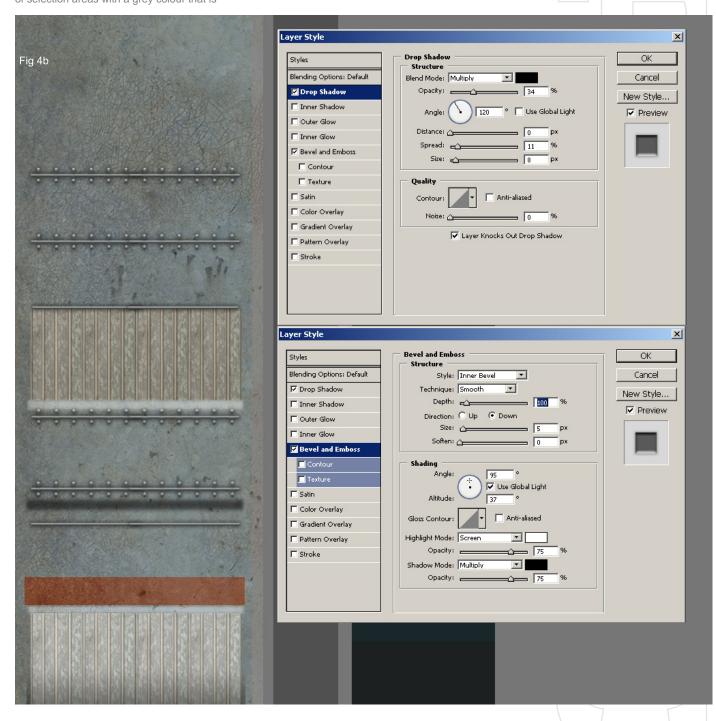


The next area to block in will be the pipes and cables which will be on the same template. For the large pipes in the corner I started with a base texture and then overlaid a metal and set it to Soft Light with 69 % opacity to add an element of age and wear to the metal and break up its uniformity somewhat. (Fig 3)

I then added a couple of details which can also be seen on the diagram together with some highlights and shadows where the pipe widens - the shadow layer being set to Multiply and the highlights to Soft Light.

The next step is to increase the detail by adding some joints and bolt heads across the pipe where the sections have been joined together. To do this we first create a new layer and then simply draw a line with the airbrush around 3 or 4 pixels wide and then using the circular marquee tool with a fixed aspect ratio (so the bolt heads are round) fill in a couple of selection areas with a grey colour that is

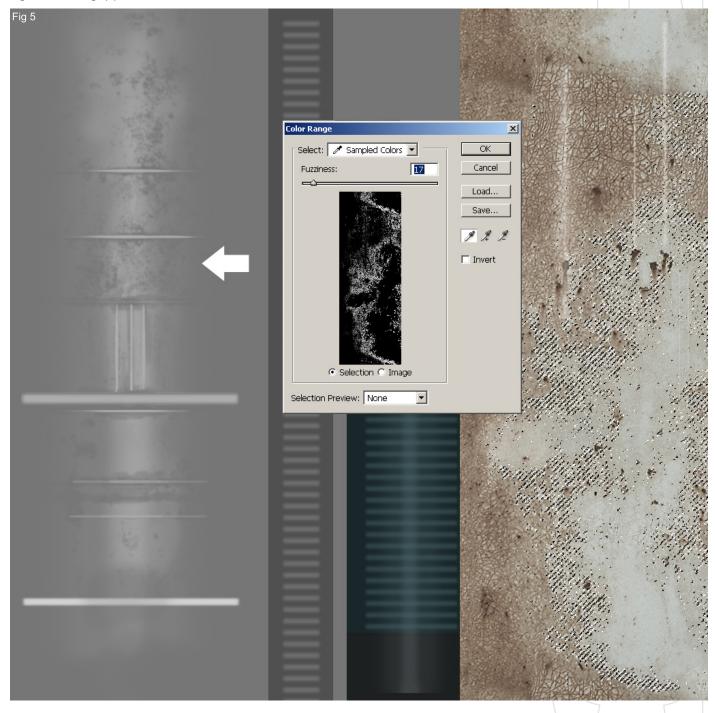
similar to the metal itself. After having done this we apply a couple of Layer Styles with settings as seen in (Fig 4). This will create a reasonable level of detail helping to give our pipe work more interest and add some illusion of geometry where there is none. We can then duplicate these elements to make up the remainder of the joints and bolts.



The next step will be to add a further highlight on the near facing part of the pipe to show it is a reflective material as well as putting highlights across the cables. In the case of the cables we just need to create a series of horizontal white lines that will describe the ribbed effect which can also be helped by a bump map following a similar pattern. With regards to the large pipes I made a colour

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range selection of the metal texture with a fuzziness value around 17 and then on a new layer airbrushed into it again using pure white set to Soft Light. Then by deselecting the area it is just a question of softening the edges with an eraser and deleting any areas that look incorrect so we end up with a highlighted area as seen in Fig 5.



issue008 April 2006

Texturing a scene

When we apply our texture we can see how the highlight and shadow layers have helped accentuate the geometry and given the pipes a little more definition. We can see that the cables now have a ribbed effect painted along their length but because they are simple cylinders they still look smooth. We could have added more subdivisions when we created them and then extruded the sections thus making the effect in 3D but as we have a poly

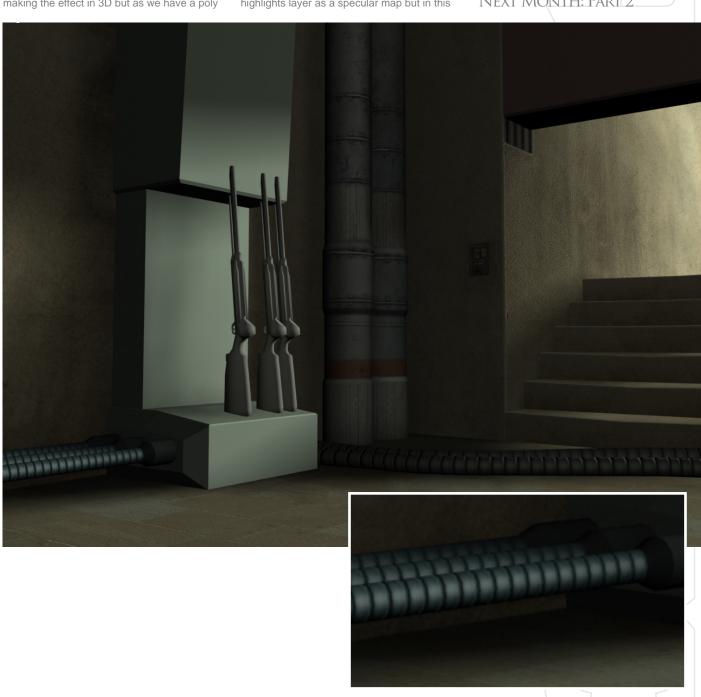
count restriction it is best to produce the effect using a bump map which can also be used as a specular map to give a reflective quality.

The bump map corresponds with the highlight sections and when applied will look as seen in Fig 6. We could have made a bump map for the large pipes which would have enhanced them further and even used the vertical highlights layer as a specular map but in this

case it is enough just to show one example of how a bump map may be used to supplement geometry.

Tutorial By : RICHARD TILBURY

NEXT MONTH: PART 2







HAIR is the first fully integrated CINEMA 4D module for the creation of hair, fur and feathers. Breathtakingly fast, this module also distinguishes itself with its intuitive interface.

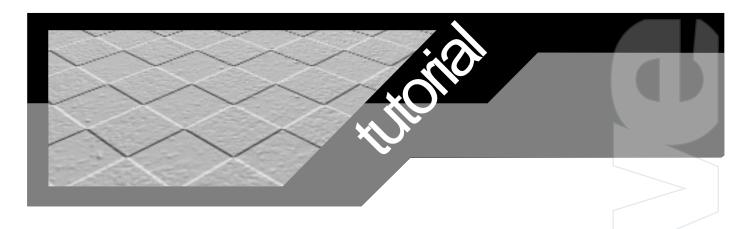
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MENTAL RAY (MAYA) PART 3

Many people keep asking if anyone got the custom mentalray bump nodes to work.

Because many people think custom mentalray bump nodes are much better than the maya's default bump2d nodes. Let's take a look.

First off we need to get the mr bump shadingnetwork actually working. Here's a hypershade snapshot of the raw bump-vector generating part: The connections are as follows:

mib_texture_vector2.outValue> mib_texture_remap2.input

mib_bump_basis2.u> mib_bump_map1.u

mib_bump_basis2.v> mib_bump_map1.v

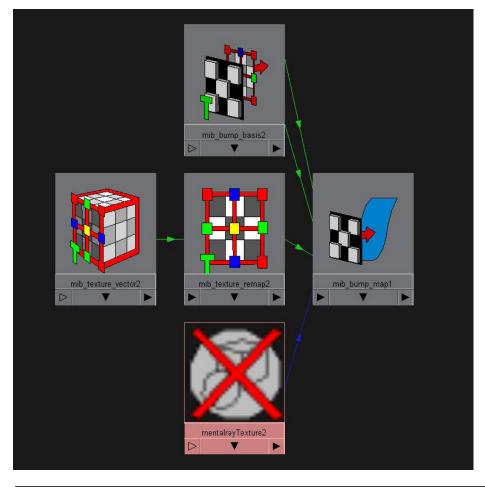
mib_texture_remap2.outValue> mib_bump_ map1.coord

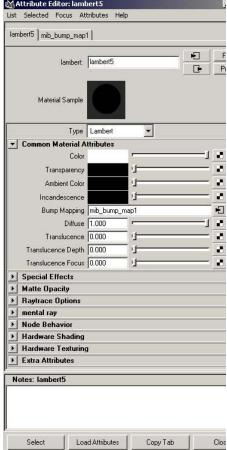
mentalrayTexture2.message> mib_bump_ map1.tex

Whereas the mentalrayTexture is being automatically created and connected when clicking on the checker button next to 'tex' in the mib_bump_map node.

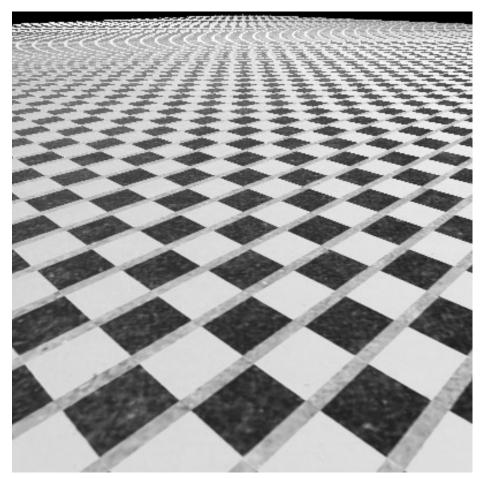
Ok, but what should we do now with the created network? There are several things we could do:

We could plug it into the bump input of one of Francesca Luce's bumpCombiner, or we could plug it into the NormalCamera (Bump Mapping slot) of any standard maya shader - basically the mib_bump_map has the same output as a bump2d:





Mental Ray (Maya) Part 3



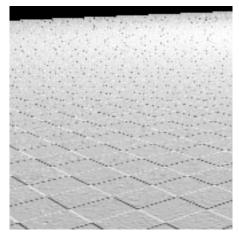
Did I say the same? Well, it's not quite the same as you can see. What happened? I left all settings at default - that was a failure. It's the 'step' vector we need to adjust, just to give you a hint. But why, and more important: how? Here's an explanation, thanks Gonzalo Garramuño:

http://www.cgtalk.com/showpost.php?p=18564 65&postcount=18

If you read through the above link, you know we have to set our step value (the texture is tiled 1-1) to 1/2560, because it has a resolution of 2560*2560 pixels. If we had 2-2 tiles we would have to set it to 1/(2560*2), the formula is

step = 1/(textureResolution*tiles)

Let's see:



Looks better, doesnt it? Because 1/2560 is quite a small number (0.000390625) I decided to write an expression to not lose any precision:

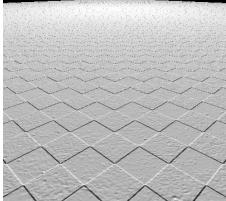
[code]mib_bump_map1.stepX = mib_bump_map1.stepY = mib_bump_map1.stepZ = 0.000390625[/code]

You probably ask yourself, how differently

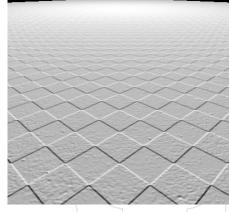
than a bump2d this shaders actually work.

Let's compare, here's a bump2d with default settings, I only set the Bump Depth to -0.010 because mr custom bump shaders bump in negative direction, and their factor acts different. Factor 1 is Bump Depth -0.010 in this example:

Bump Filter is 1, texture filter is Quadratic with Filter 1 - all default. Quite dull compared to a standard bump you might think. Let's remove all the filters; but [i]dont[/i] set the Texture Filter to off, leave it at Mipmap - I only set the Filter under Effects to 0, as well as the Bump Filter of the bump2d node:



Hey, it's almost the same! Maybe we can assimilate it even more? We can, because apparently the step value of our mr custom bump needs to be 10 times lower and it's factor 10 times higher to compensate the differences - this is the adjusted mr custom bump:



Mental Ray (Maya) Part 3

Except a few pixels, the result is exactly the same as with a bump2d. Exciting, isnt it?!

Well... You probably ask yourself what the other available bump node, the mib_ passthrough_bump_map is good for. It has the same effect, it is only connected differently to the shading network. Here's a snapshot of what I mean:

bumpCombiner or bump passthrough around, it's wasted time to build this networks (probably not in every case of course).

In reverse, the bump2d has some big bonus like the bumpFilter and the ability to use texture filters (quadratic etc.) to reduce texture artefacts, and all the other benefits that come with the regular maya file and texture nodes.

NB: This is a rough comparison between the two methods to get mentalray bumping. It may, of course, not apply to all possible situations.

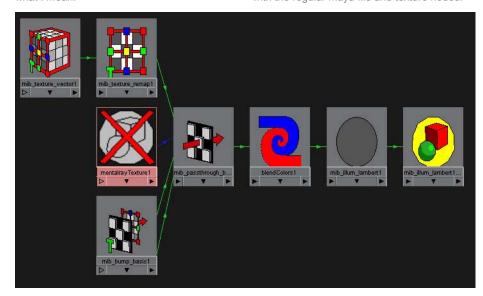
And do try this at home!

You could set your surface's as normal (bump it) by passing any shader through a plain standard maya lambert's incandescence, set the lambert's color to black, it's diffuse value to 0.0, and plug a regular bump2d into the Bump Mapping slot as you would do as usual. The shader in the incandescence slot inherits the altered surface normal from it's parent, the maya lambert.

Contact me via mymail@floze.de, or visit my website at

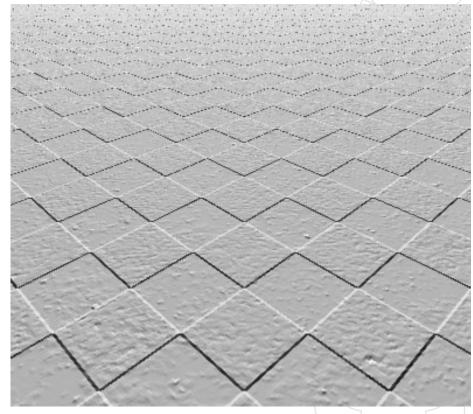
http://individual.floze.de/

Tutorial By: FLORIAN WILD



Ugh. What's that blendColors node doin there? Well, I guess the mentalray developers simply had a good idea to pass a bump vector through a shading network if you dont have a Bump Mapping slot around, as with all mr custom shaders like the Cook-Torrance or DGS for example. The blendColors color1 is the mib_passthrough_bump_map, and color2 is the texture (a plain gray color in our case). It's Blender value is very low at 0.001, just as low to be non-zero. It's a trick of course. The result is the very same though (with adjusted step settings etc.

So. What are the reasons to use custom mr bump shaders? If you ask me, I dont see any. The bump2d has, with all filters off and mipmap activated, the exact same output. As long as you dont use mr custom shaders [i]plus[/i] and as long as you dont have any



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JOAN OF ARC PART?

We bring you Part 8 of Michel Roger's famous 'Joan of Arc' tutorial in Maya, Lightwave, C4D & XSI, if you are a Max user and this is new to you the original is free and can be found in French as Michel's site http://mr2k.3dvf.net/ and in English at www.3dtotal.com.

INSPIRING

If there has been one single tutorial that has educated and inspired more budding 3d artists than anything else, this complete step by step project by Michel's must be it. The community is in debt to him and in our october issue we interviewed the man himself! The Tutorials are free to download for 3dcreative customers. For security purposes you will need to email

joanofarc8@zoopublishing.com

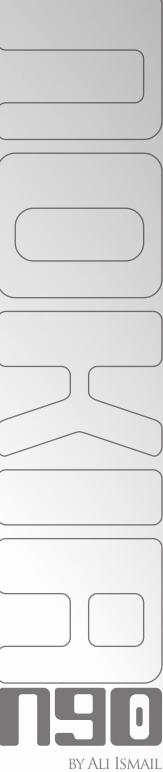
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immediately so that any problems can be fixed promptly.





This article is more about texturing and lighting an industrial model than polygon modeling. Adding animation controls, texturing and finally lightning and rendering the scene were done using 3dsmax, Vray and Photoshop. However, the principles could apply to most software packages.

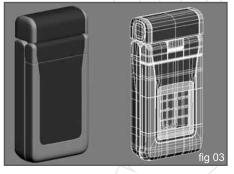




This article is more about texturing and lighting an industrial model than polygon modeling. Adding animation controls, texturing and finally lighting and rendering the scene were done using 3dsmax, Vray and Photoshop. However, the principles could apply to most software packages. Usually it is hard to find the appropriate reference images for the required subject, but if you can

manage to find a decent front, & side view it should be enough. It is not too important that the images are perfectly orthographic. Fig 01 is an example of an acceptable image. (I know this tutorial isn't about making a car but I just wanted to show the effect more clearly). The image appears to be very good for use as reference but when comparing it to the wireframe on the right the reference doesn't

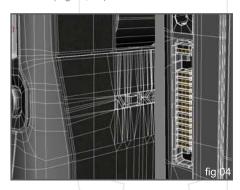




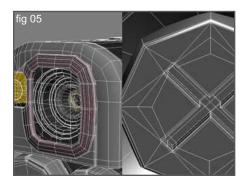
actually match at all.

I started the model with a box which was steadily moulded into the detailed shape of the phone. I could have modelled everything in quads at a base level, obtaining all the needed details more quickly by making the basic shape and then applying meshsmooth. Then using a Boolean to cut the things I needed. However, I really wanted to get a nice clean mesh that cannot be obtained by using Boolean (Fig 04, 05)

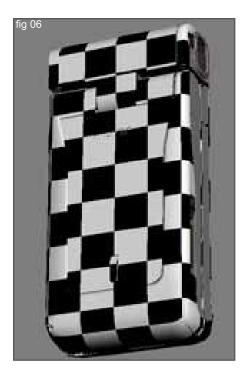




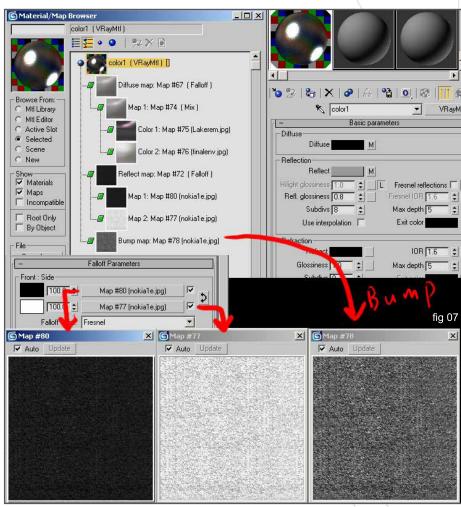
making of

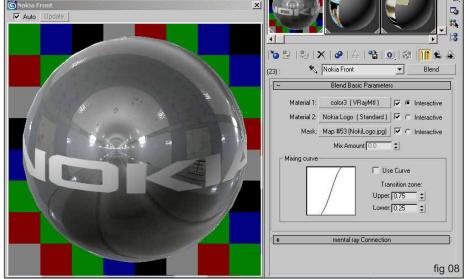


I unwrapped this model then used bitmaps for diffuse and bumps (Fig 06).



I did use blend materials for areas where there is text on top of anything, in order to give it a different material. All the main materials were Vray materials. For the primary 'shiny' material I used a mix map for the diffuse with environment images. For the reflection I used falloff fennel, but for the first map slot I used the same bump map but with a low output which makes it dark, and for the second map slot I used it again but with a 0.5 RGB offset to make it bright. I wanted to get the affect of tiny grains, similar to using specular maps which fakes how light will reflect (Fig 07, 08)

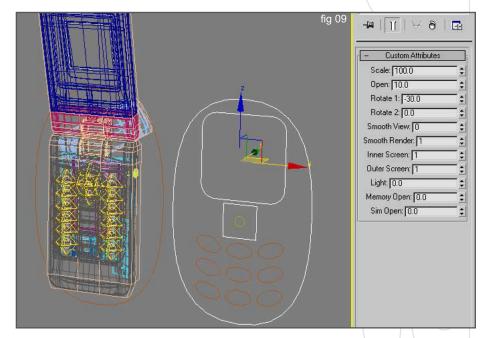


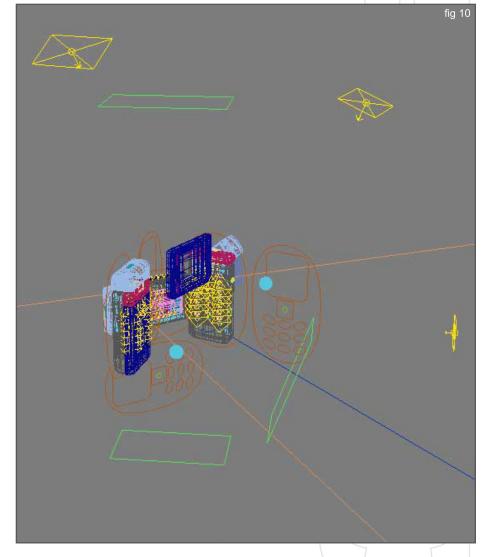


making of

The phone rigging was done using the simple reaction manager, it's really easy to use and comes in handy. But there is a small trick that I find very useful. You can control any modifier or material using the reaction manger. You can use this for example to make textures morph, by using a mix map and applying controls to it (An alternative approach would be to use a morph material but this is a different method). I also made dummy low detailed objects to make it easier to animate. The omni lights you see are only for the rig, they are turned on when the light value increases at the main controller, the texture of the dials will also change to a lit one when the light value of the controller increases, by controlling the mix map value (Fig 09).

I rendered it using Vray with indirect illumination, the primary bounce engine, is an irradiance map, the secondary is a light cache. I used a HDRI map for the environment reflections, and a white colour skylight. I also added multiple Vray lights, which are visible and reflected by the model. I used standard boxes as well, with Vray light material to quickly reflect more specular highlights and increase the overall lighting (Fig 10).





making of

That's pretty much it, I did however do some tests before reaching the final output for lights and materials. Here are a couple of images rendered when I was still testing with lights and materials. I hope I haven't bored you through the article and that there was something useful

NOKIA

for you;)

Making Of By: **ALI ISMAIL**

ali@aliismail.com www.aliismail.com



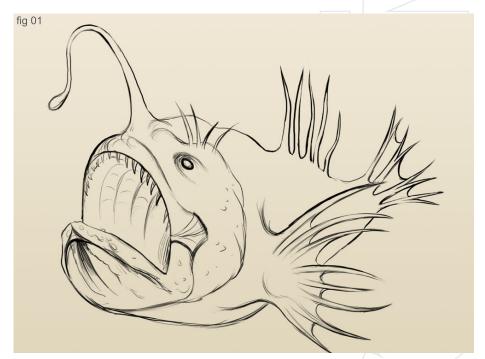












In this article I'll try to show how the image "Deep Fish" was created, and why I never make the effort to get the final render out of the 3d program, and prefer to use compositing. Why did I create the image? Well, I was inspired by a wonderful film about life in the deepest seas by the BBC (British Broadcasting Corporation in the UK), which I saw on the Television. I think it was called "The Deep", but I'm not sure. The ultimate goal was to create the dark and gloomy atmosphere, found at the bottom of the ocean. One of the main difficulties of this was to make the image dark enough (because there is no light at such depths), but still to leave some visible details so you could see the form of the fish. I began by making two sketches, the first for the modeling and the second for the colour and composition of the scene. (Fig 01, 02)

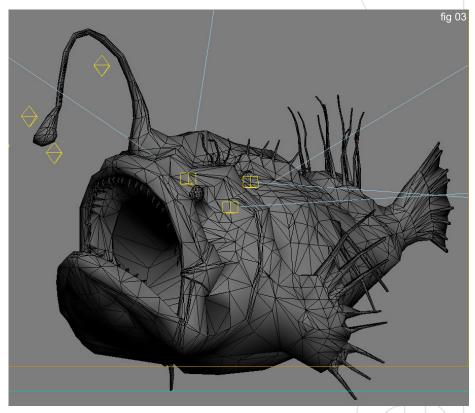


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Deep Fish

I used 3dsmax for this work, but the main principles are the same in all 3d packages. It is also good to get into the habit of using sketches for modeling, because you can work without the fear of losing the models main proportions. The modeling wasn't too hard. I created the box, converted it to editable poly and then just added, moved and welded edges polygons and vertexes. Here is the wire of the final model before subdividing: (Fig 03)





I began the modeling using 'quad' (4 sided) polygons, but I converted the mesh to 'tri's' (triangular polygons) later because I didn't want it to be too smooth after subdividing. The next part was very unpleasant for me; unwrapping the model for texturing. I used the unwrap UVW 3dsmax tool, it was a boring, but easy and rather long process, however, it was necessary to get the best results. Here are the UVWs after unwrapping: (Fig 04)



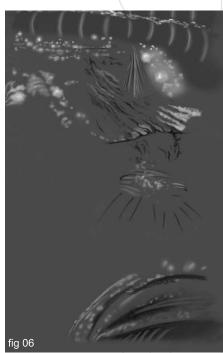
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Deep Fish





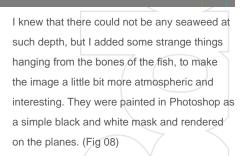


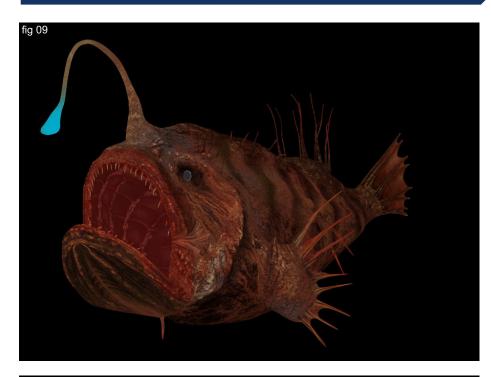
I then began to paint textures using photoshop. First of all, I'm a 2d artist, and I usually use a 3d program as a 'plugin' for Photoshop or Painter. Painting of the textures was therefore much more interesting for me than the modeling or unwrapping stages. I ultimately ended up with three maps: Diffuse (or colour map), Displacement map and the SSS map (sub surface scattering). The SSS map was basically a slightly modified diffuse map. It was necessary to paint the separate SSS map so I could imitate the bones inside the fish, where the body is slightly transparent. I initially wanted to create the displace map using ZBrush, but it is much easier for me to paint it in photoshop, and I was so satisfied with the



first test renders of the displacement I forgot the idea of creating it with ZBrush altogether. (Fig 05, 06).

I then modeled the bones for the back, using the same edit poly tool. I didn't pay too much attention to them as they are not the primary objects of the scene, so the model was kept very simple: (Fig 07)









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A Few words about the lighting setup: I used a few omni lights to make the light appear to be coming from the 'fishing-rod', and a HDRI image to light the body of the fish. Then finally I began to output renders. From the beginning I knew that I wouldn't need to render the whole scene in one final image, I wanted to render different layers to composit them at a later stage. For the rendering I used Vray, because it can easily export out the separate layers. In all, approx. 16 different layers were used (some for the fish, some for the back, and a separate layer for the plankton). I prefer to use separate layers because I can color correct each of them separately, without adding unnecessary time to the rendering process. I can add or remove the reflection, lights or refractions taking only seconds instead of hours. This is a very convenient method, especially when you render large images with GI which can take a very long time. The main layers for the fish were diffuse, raw GI, raw light, reflections, refractions (sss). I even rendered three different refraction layers so I could achieve different effects, either to make the whole fish more transparent, or to light only the thin parts like the fins. Some layers: (Fig 09, 10, 11 & 12)



You can use any compositing software to gather the final image, including Photoshop.

I prefer a node-based compositing such as Shake or Nuke. The way to mix your layers is very simple: you should multiply raw gi and diffuse and add reflections, refractions and light (screen in Photoshop). Here you can see the result of mixing main layers of the fish without any correction: (Fig 13)

There are also two very useful and quick rendered layers: z-depth and 'Normal's'. (Fig 14, 15)

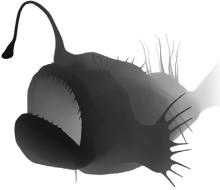
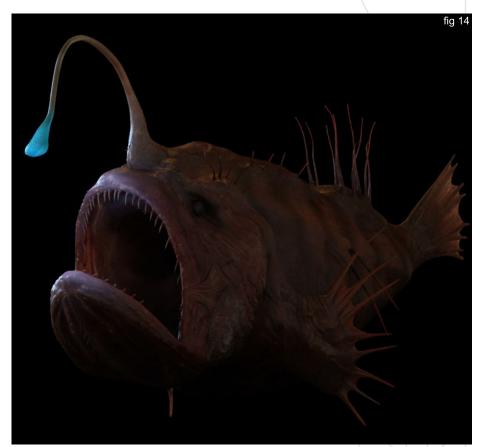
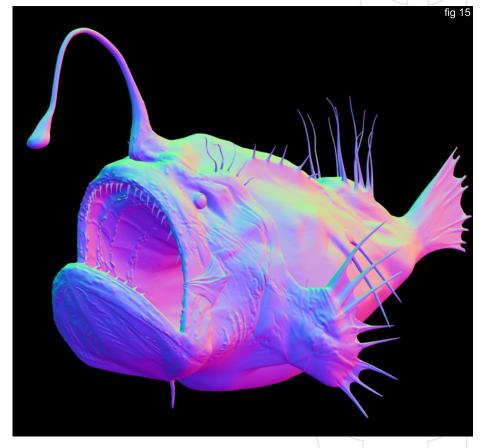
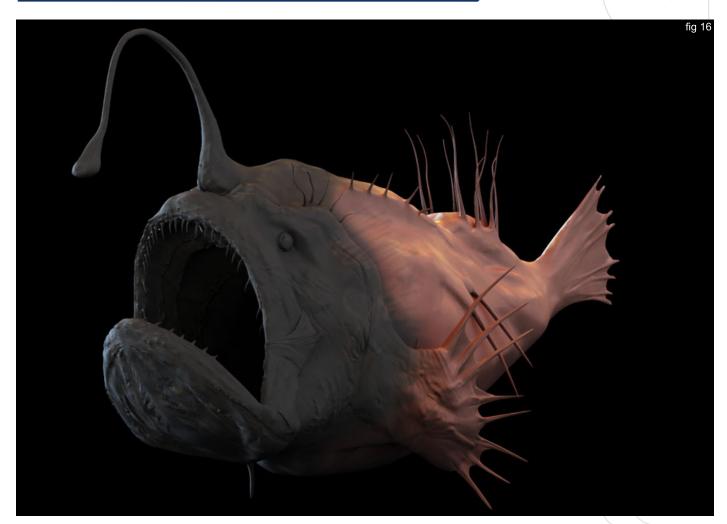


fig 13

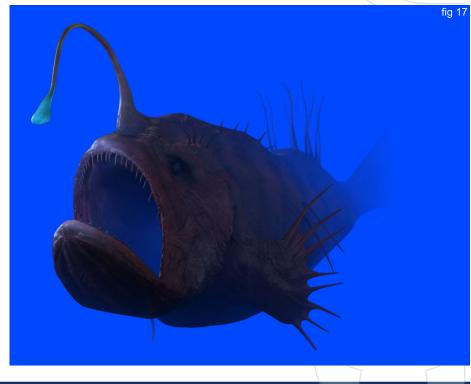






You can use 'Normal's' to correct any of your layers, for example to light them from any side using the R (red),G (green), or B (blue) channel of the 'Normal's' layer as a mask for color correction. Here is an example; the left part of the image is the rawGI layer, and the right part was corrected using Normal's layer. (Fig 16)

The z-depth layer is used to make the difference between the farther and closer objects of the scene, and it was quite useful to imitate the water. (Fig 17)



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Deep Fish





I rendered the bones for the back the same way, then I rendered the plankton layer (I used a particle cloud to generate it). I rendered the blind eye of the fish separately, which gave me all the necessary materials for compositing, then I could shut down 3DSMax. Now all I had to do was to colour correct the layers to create the mood in the image. And here is the final result:

As you can see it is pretty far removed from the original render images. I didn't want to show you a step by step tutorial how to create the same image, but the main idea of my tutorial was to show you the benefits of compositing, I hope you could save hundred hours of rendering time using these layer compositing techniques.

Project Overview By

OLGA ANTONENKO

For more images please visit or email: www.cgppolis.com info@cgpolis.com





The Making of Lyer

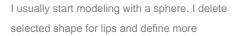
Hi. I am Prashant Sadaphule from India. I wanted to explore certain areas like character modeling / texturing & lighting, which is what inspired me to do this model. The character and image were created using 3dsmax7, Maya, Body paint and Photoshop. Below you can see the photo references of my friend Kameswaran lyer, commonly known as 'Kamee'. He is always laughing when he talks, so this is a pretty standard expression for him. Kamee is a South Indian Brahmin. This model is a representation of him in his traditional clothing.

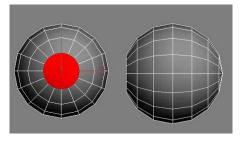


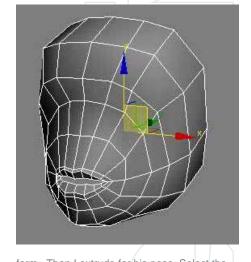


PROCESS OF MODELING:

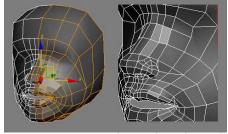


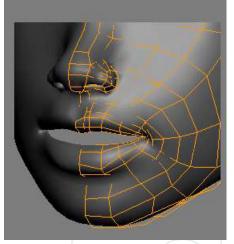




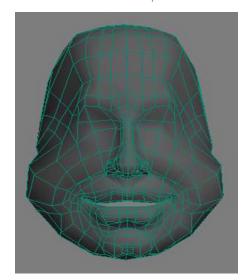


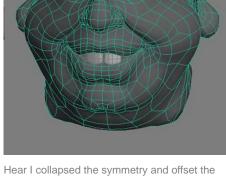
form. Then I extrude for his nose. Select the highlighted face shown below and extrude to define nose.

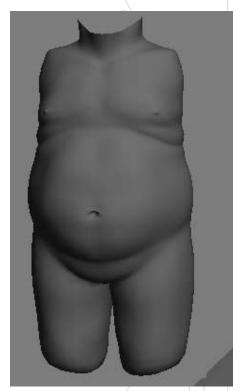


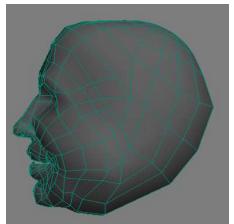


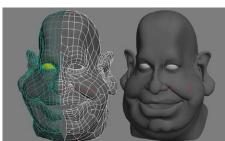
Now I start to give shape to the model until it comes near to the reference photo.





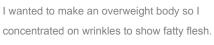




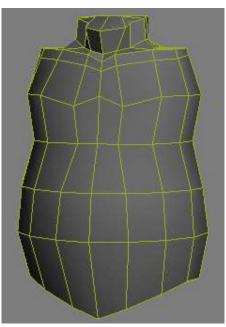


right side lips shape and jaw.





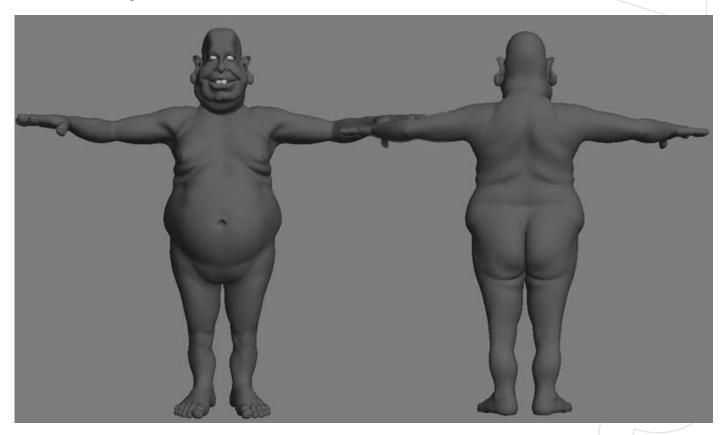




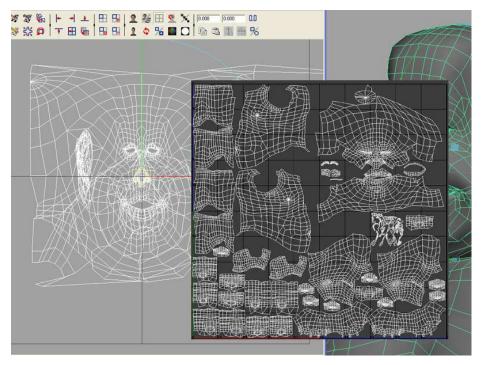




I was really not happy with the shape of the body. Finally I got what I wanted. This is the finished work of modeling.



I unwrapped the model for texturing



First I created basic colour and bump in Photoshop and then started painting the texture in Bodypaint.



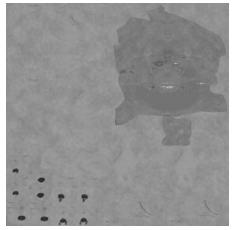
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Kameswaran lyer





I used Maya for rendering the model with MentalRay.

Making Of By : PRASHANT SADAPHULE



DIGITAL ART MASTERS:VOLUME I Starting this month and for the next 6 months, we have exclusive chapters from 3DTotal. com's new book 'Digital Art Masters'. The book is more than just an artwork book as not only does it feature full colour, full page images, each artist has described the creation process in their own words, and exclusively for this book. This month we feature: 'Hot and Dusty' by Niels Sinke









Concept
This price is entitled "Hot and Dusty" as it should represent a very hot day at Dusck Rock Desert in the USA. Vibrita swimming one day, intermethered the time when I had the chinicance to experience unless shalling used assess them I have always wouldn't be make my one load youth and writered beto but this man of I did not make any concept alerticles (which I only occasionally do) but strated to look at references of the read deal on the intermet and the mains a rough responsionation in 50 with minimal shapes and forms (I) to make a composition and you think the contract of the main of scale.

Modelling



These Shots of the book pages are full resolution and can be read by zooming in.

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The testuring is the part which I also past. In this case I is used Virey for rendering which also has to see na materials, and really large the air to a new level. First of all I started to testure the different parts (see the body (3), (4), tyres and sair (5). The sail was the most interesting part, as I had to design my own sail since I could not find any useful references for that.

same in design. So I searched for speed windsurfing sales and found a very nice one, which I made fit on the sail texture I got from my sail in 3D Studio Max. I added my own design to it in Photoshop and concluded the sail.

Compositing

Compositing
This part was quite important, as I had to make a background where the sail car could fit in. It had to be disclored where the sail car could fit in. It had to be disjoint with multiple perspectives and also give the feel I wanted I searched for several hours to find numerous images but did not find one with the colours and feel











Lighting

Post production







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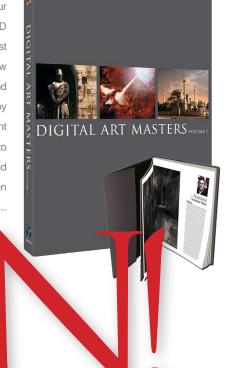
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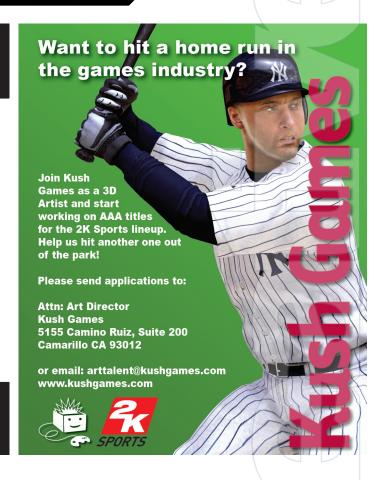


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